

be considered extremely carefully. We need to know more about them because measures of this kind may be crucial if greenhouse warming occurs, especially if climate sensitivity turns out to be at the high end of the range considered in this study. Efforts by societies to restrain their greenhouse gas emissions might be politically infeasible on a global scale, or might fail. In this eventuality, other options may be incapable of countering the effects, and geoengineering strategies might be needed. Some of these options are relatively inexpensive to implement, but all have large unknowns concerning possible environmental side-effects. They should not be implemented without careful assessment of their direct and indirect consequences.

TABLE 6.2 Comparison of Selected Mitigation Options in the United States

Mitigation Option	Net Implementation Cost ^a	Potential Emission Reduction (t CO ₂ equivalent per year)
Building energy efficiency	Net benefit	900 million ^c
Vehicle efficiency (no fleet change)	Net benefit	300 million
Industrial energy management	Net benefit to low cost	500 million
Transportation system management	Net benefit to low cost	50 million
Power plant heat rate improvements	Net benefit to low cost	50 million
Landfill gas collection	Low cost	200 million
Halocarbon-CFC usage reduction	Low cost	1400 million
Agriculture	Low cost	200 million
Reforestation	Low to moderate cost ^d	200 million
Electricity supply	Low to moderate cost ^d	1000 million ^e

NOTE: Here and throughout this report, tons are metric.

^aNet benefit = cost less than or equal to zero

Low cost = cost between \$1 and \$9 per ton of CO₂ equivalent

Moderate cost = cost between \$10 and \$99 per ton of CO₂ equivalent

High cost = cost of \$100 or more per ton of CO₂ equivalent

^bThis "maximum feasible" potential emission reduction assumes 100 percent implementation of each option in reasonable applications and is an optimistic "upper bound" on emission reductions.

^cThis depends on the actual implementation level and is controversial. This represents a middle value of possible rates.

^dSome portions do fall in low cost, but it is not possible to determine the amount of reductions obtainable at that cost.

^eThe potential emission reduction for electricity supply options is actually 1700 Mt CO₂ equivalent per year, but 1000 Mt is shown here to remove the double-counting effect (see p. 62 for an explanation of double-counting).